

### **ABSTRACT OF THE DISCLOSURE**

In a method and a network for evaluating medical data in a clinical study, biochips containing patient samples with multiple biomolecular markers are tested in a number of point of care test devices respectively at point of care sites. Each test of each biochip sample produces a diagnostic result, which is entered into the electronic patient record for the patient who produced the sample. A follow-up examination is subsequently conducted for each patient, and the results of the follow-up examination are also entered into that patient's electronic patient record. The follow-up results indicate whether the diagnostic test result was a false positive, a false negative or correct. The follow-up data and the original diagnostic results from all point of care sites are electronically transmitted to a remote server, which has access to an expert system which uses the test results and the follow-up data to automatically devise a measurement protocol for a selected pathology.